## **EXHIBIT 62**

## SUPPLEMENTAL SUR-REBUTTAL EXPERT REPORT AND

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I, Colonel (Ret.) Craig Tucker, declare under penalty of perjury that the following is true and correct:

DECLARATION OF COLONEL (RET.) CRAIG TUCKER

- I have been asked by the Office of the Attorney General of the 1. 5 California Department of Justice to prepare a sur-rebuttal expert report and 6 declaration responding to the February 3, 2023 Rebuttal Report of J. Buford Boone 7 III and in further support of my opinion that firearms covered by California Penal 8 Code § 30515 are designed and best suited for military use. This supplemental sur-9 10 rebuttal expert report and declaration ("Report") is based on my own personal knowledge and experience, and, if I am called as a witness, I could and would 11 testify competently to the truth of the matters discussed in it. 12
  - 2. Despite Mr. Boone's assertion to the contrary, the entirety of my declaration extensively explained, based on my experience, how the features identified in California Penal Code § 30515(a) enhance the lethality of both semiautomatic and automatic rifles, and why they are most appropriate for combat applications when used in conjunction with those types of weapons systems.
  - 3. The Armalite-15 (AR-15) and its derivatives from other manufacturers are described as the "civilian version" of the M4/M16 military series. Generally, the only difference between the two is that the M4/M16 can fire on automatic and the AR-15 cannot. That means that the M4/M16 will continue firing rounds with a single pull of the trigger until the trigger is released, the ammunition magazine is emptied, or the weapon malfunctions. But all the other elements that make the M4/M16 an assault weapon are present in the AR-15: 8 cycles of functioning (i.e. feeding, chambering, locking, firing, unlocking, extracting, ejection, and cocking), barrel rifling, rates of fire when fired semi-automatically, round caliber, internal, external, and terminal ballistics, attachments, sights, rails—all are the same in the civilian version and the military version.

- 4. The M16/M4 is a lightweight, 5.56 mm, air-cooled, gas-operated, magazine-fed assault rifle, with a rotating bolt. The M16/M4 is a weapon of war specifically designed to kill as many people as possible as quickly as possible. The entire weapon is designed for efficient killing in rifle combat.
- 5. So is the AR-15. Same design. Same weapons purpose. Simply labeling the civilian version of an M16 as a "sporting rifle" or a "hunting rifle" does not change the true nature of the weapon of war, including its purpose and capabilities. The AR-15 and M16/M4 are both designed to kill efficiently and effectively and serve no legitimate use for personal self-defense.
- 6. In my opinion, a baseline requirement for claiming expertise on the AR-15/M4 is to have employed the weapon, and employed it properly, consistent with training and doctrine, during offensive and defensive rifle combat. In other words, to have employed the weapon for its intended purpose. Assault rifle "expertise" does not exist absent that experience. I have known many combat heroes who could be considered assault rifle experts. Any individual claiming that same expertise based on a lifelong "interest in firearms," technical knowledge of .223/5.56 ballistics, or some shooting trophies is not an expert on the suitability of assault weapons for combat and dishonors those who are. Mr. J. Buford Boone III had the opportunity to gain the appropriate level of expertise and experience while fighting alongside heroes I served with. Yet he chose to not serve.
- 7. Despite Mr. Boone's enumeration of the many different types of 5.56 and .223 projectiles, the fact remains that the AR-15 and M4/M16 fire similar .223/5.56 rounds. The spiraling on the barrel is designed to cause the projectile to yaw in flight after leaving the barrel. The "yaw" is designed to present the long axis of the projectile upon impact with flesh. This ensures that the maximum mass and energy is imparted from the projectile to the victim. Mr. Boone and I agree on this point.

- 8. And while Mr. Boone may have general ballistics experience, it does not appear that Mr. Boone has ever witnessed a .223/5.56 projectile strike a living being, from a weapon whose distinguishing quality as a weapon of war is its ability to inflict a maximum amount of damage to a human being. Mr. Boone mocks my comments on .223/5.56 projectiles being capable of causing decapitation, or wounds so large that they separate the upper body from the lower body. But I have seen the results of that terminal velocity on a human being. The round strikes flesh with maximum energy and mass, cavitates through the body, tumbling on a fairly direct line until it contacts bone, at which point the bullet fragments tear out organs, blood vessels, viscera, etc.
- 9. One example of such damage occurred during a particular fight during the Second Battle of Fallujah. One of the Marines under my command was on a third story roof, keeping overwatch, with the rest of my team in an adjacent alley huddled over maps. Suddenly, there was an AK-47 burst of fire from the rear. The Marine yelled a warning, exposing himself on the roof, and with his offhand, aimed his M4 and killed the aggressor before the aggressor got a second shot off. The projectile struck the aggressor in the shoulder, and exited through his groin, as intestines, blood, and pieces of liver flowed out the exit wound.
- 10. Even setting aside the effects of .223/5.56 rounds (and similar AK-47 and -74 rounds) on adult male bodies, Mr. Boone forgets, or ignores, that adult males are not the only victims of yawing, tumbling, rounds fired from an assault weapon. I have seen the bodies of young children torn in half on the streets of Al Rutbah. And it does not take much reading between the lines to understand the effect of 5.56 rounds on first graders, or fourth graders.
- 11. Given that Mr. Boone did not serve in the military, his declaration reflects his unfamiliarity with combat, military operations, military nomenclature, and military training. I will address these each in turn:

- 12. Pistol grips and folding stocks: Pistol grips are not designed for safety. Safety is not even a secondary consideration. In fact, Mr. Boone agrees with my assessment that pistol grips on automatic weapons increase control in rapid-fire scenarios, and therefore increase killing efficiency. This makes sense, since automatic weapons are designed for efficient and effective killing by the military and for use by law enforcement personnel, all of whom are taught proper weapons handling and employment and are subject to rules of engagement and strictly defined tactical controls.
- 13. Mr. Boone misunderstands my assessment of the danger of folding stocks. While making sure a folding stock is properly locked is a pretty simple process when you are sitting in a chair on a rifle range, that action is much more complicated in combat or self-defense. Mr. Boone has never climbed out of a burning vehicle into machine gun fire and in the adrenaline of the moment failed to lock the folding stock on his M4. Mr. Boone does appear to concede that not all folding stocks are stable, and I have personally witnessed as much during combat.
- 14. <u>Changing magazines:</u> I have 25 years of experience as an infantry officer in the Marine Corps, including 14 months of continuous combat command, after which I was responsible for training and certifying Marine infantry battalions for combat. I know what I am talking about when I state that changing magazines is the most important individual skill taught to Marines.
- 15. <u>Rates of fire:</u> Mr. Boone was apparently confused by my use of tactical terms to describe the tactical function of automatic weapons.
- 16. There are two tactical and one physical rates of fire associated with an automatic weapon. The rates provided below are the firing rates for automatic weapons fired in semi-automatic mode

*Tactical rates of fire:* 

- 17. Sustained rate of fire: 12-14 rounds per minute, when fired semi-automatically. A 'sustained' rate of fire is the rate one can fire an automatic weapon for a long period of time without undue wear and tear on the weapon.
- 18. Maximum rate of fire: 45 rounds per minute, when fired semiautomatically. The "maximum" rate of fire is used for short range and short-term engagements, for short periods of time.
- 19. Tactical rates of fire: depends on the type of fire-rate used in fire commands—i.e. soldiers are ordered to fire at a sustained or maximum rate depending on the tactical situation.

Physical rates of fire:

- 20. Physical rates of fire refer to the "cyclic rate," or maximum rate at which the firearm can go through a full cycle of operation. The cyclic rate is 700-970 rounds per minute.
- 21. In my previous declaration I used the maximum rate of fire (45 rpm) to illustrate the inanity of using an assault weapon as a self-defense weapon. I stand by that conclusion.
- 22. The sustained and maximum rates of fire for the AR-15 mirror the M4 at 12-14 rounds-per-minute and 45 rounds-per-minute, respectively, when fired semi-automatically.
- 23. Mr. Boone's assessment that any weapon can have the same rate of fire as an assault weapon fails to account for the other attributes of AR-platform rifles and automatic M4s that make them particularly dangerous. In any event, Mr. Boone's assessment is inaccurate. As an example, a Ruger revolver has an approximate cyclic rate of 20 rounds per minute and the Colt Model 70 has an approximate cyclic rate of 50 rounds per minute, compared to the cyclic rate of automatic weapons of 700-970 rounds per minute.

- 24. <u>Forward pistol grip:</u> Mr. Boone agrees with me that pistol grips are used for ergonomics and control. As the purpose of the automatic weapon is to kill efficiently, ergonomics and control increase that killing efficiency. For purposes of clarification, I used "short barrel" to refer to the length of the M4 barrel compared to the M16 barrel. I stand by my comments in that regard.
- 25. Flash suppressors: Regarding night vision: it takes 20-40 minutes to gain night vision and 2-20 minutes to regain night vision if it is interrupted by any light source, including muzzle flash with or without a flash suppressor. In other words, the recovery time is not impacted by whether or not an assault weapon has a flash suppressor; the amount of flash generated by firing an assault weapon—even with a flash suppressor—impacts the shooter's vision in a similar way. So the type of "night vision recovery" that Mr. Boone describes is not an issue if there is no flash suppressor on the weapon. This is yet another reason AR-15s are poor self-defense weapons. As I stated in my declaration, flash suppressors mitigate muzzle flash impact on night vision goggles used in combat. Mr. Boone does not dispute that. The impact of full muzzle flash is compounded when a soldier is wearing night vision goggles because those goggles are designed to magnify contrasting light. The flash suppressor blunts that, to some extent. But without such goggles (such as non-combat self-defense), this purpose of the flash suppressor is negated.
- 26. <u>Use for sport:</u> Assault weapons serve no legitimate hunting purpose because the terminal ballistics of the projectile ruin the meat. And in my opinion, it is not appropriate to use weapons of war just for sport.
- 27. <u>Defensive use:</u> Mr. Boone is incorrect in stating that all legal law enforcement use of firearms is defensive in nature. Special Weapons and Tactics Teams (SWAT) are specifically designed for offensive operations and are thus armed with assault weapons for offensive operations, but pistols for self-defense.
- 28. In fact, I cannot bring to mind a single law enforcement agency, military organization, or para-military organization that employ assault weapons as

the primary firearm for self-defense purposes. To my knowledge, all of those organizations use pistols for self-defense and close combat—proof of how those organizations view the viability of assault weapons as the self-defense weapon of choice.

- 29. Mr. Boone is correct that if my regiment were attacked with long range rifle fire, I would respond with every weapon system at my disposal except the M4. (The M16 is much more effective in defensive combat then the M4.) But that is in the military context. It does not make assault weapons necessary for self-defense. The reality is that, in the defensive context, assault weapons (especially with more than 10 rounds) are unnecessary. It rarely takes more than a couple of rounds to incapacitate an intruder. Any fantasy of fighting machine gun battles in your living room is exactly that: a fantasy. Self-defense gun battles, should they come to pass, are generally fought with combatants in close proximity, with few if any shots fired.
- 30. Mr. Boone describes what he calls "Close Quarters Combat," or CQB. Neither of these are terms recognized by the Department of Defense or any of the military services. Close Quarters Battle (CQB) was a training technique employed by special operations forces engaged in direct action or precision raids. The .45 caliber pistol was the weapon of choice for those units, not the M4 or M16. CQB describes a training method, not a tactical method. Mr. Boone claims that "[o]ver the past 20 years, there has been news coverage of U.S. Marines engaged in or on their way to potentially engage in CQB" that "were armed with M4 or M16 style carbines/rifles and/or squad automatic weapons."
- 31. What Mr. Boone likely observed on his TV or in the press was Marines, Soldiers, Sailors, and Airmen engaged in offensive rifle combat in an urban environment—heroic young men and women earning the right to be called expert riflemen. Again, Mr. Boone's observations have nothing to do with self-defense.

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32. Mr. Boone's declaration demonstrates his unfamiliarity with military service and combat. Based on my personal military experience, I stand by the opinions in my declaration and reiterate that firearms covered by California Penal Code § 30515 are designed and best suited for military use.

I declare under penalty of perjury that the foregoing is true and correct. Executed on February 24, 2023 at Sandia Park, New Mexico.

